#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014424 Address: 333 Burma Road **Date Inspected:** 21-May-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Yu Dong Ping **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: Tower Components** 

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

#### TOWER TRIAL ASSEMBLY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005789

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

EAST TOWER LIFT - 1 DOUBLER PLATE & CROSS BRACING

P475 - E - 1; 3; 5

**BAY#11** 

This QA Inspector observed the following work in progress: Shielded Metal Arc Welding (SMAW):



## WELDING INSPECTION REPORT

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Weld joint #9B located on Tower Strut ED1 – STSA4 – 6–143M – 1. Welder is identified as 044541. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2212 - Tc - U5b. (See attached photo)

Weld joint #9B located on Tower Strut ND1 – STSA4 – 10 – 119M – 2. Welder is identified as 041271. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2212 - Tc - U5b.

Weld joint #7A located on Tower Strut ED1 – STSA4 – 10 – 119M – 1. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3212 - Tc - U5b - 1.

Flux cored Arc Welding (FCAW):

Weld joint #29 located on Bearing Stiffener of Shear plate WD1 – A25B/B. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Zhao Mao Mao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F.

Weld joint #53 located on Bearing Stiffener of Shear plate SD1 – A20B/B. Welder is identified as 053486. ZPMC Quality Control (QC) Inspector is identified as Zhao Mao Mao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F. (See attached photo)

Weld joint #21 located on Bearing Stiffener of Shear plate WD1 – A21A/B. Welder is identified as 040726. ZPMC Quality Control (QC) Inspector is identified as Zhao Mao Mao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2331 - Tc - P4 - F.

### **BAY#16**

This QA Inspector observed the following work in progress:

Flux cored Arc Welding (FCAW):

Weld joint # 07 located on Façade built up channel assembly ED1 – SFSA4 – 1703. Welder is identified as 218995. ZPMC Quality Control (QC) Inspector is identified as Wang Hao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132.

Weld joint # 08 located on Façade built up channel assembly ED1 – SFSA4 – 1700. Welder is identified as 201888. ZPMC Quality Control (QC) Inspector is identified as Wang Hao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132. (See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

No Relevant Conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer